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DECLARATION OF INDIAN RIGHTS TO THE NATURAL RESOURCES IN THE NORTHERN GREAT PLAINS

Northern Great Plains Resource Program

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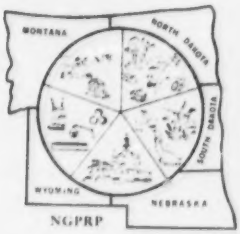

DECLARATION OF INDIAN RIGHTS TO THE NATURAL RESOURCES IN THE NORTHERN GREAT PLAINS STATES

NORTHERN GREAT PLAINS RESOURCES PROGRAM

NATIVE AMERICAN NATURAL RESOURCES DEVELOPMENT FEDERATION OF THE NORTHERN GREAT PLAINS

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A declaration is presented of Indian rights to natural resources, with emphasis on water, in the states of Montana, Nebraska, North Dakota, South Dakota, and Wyoming. It is a consensus declaration of the 27 tribes located in these states. It declares that "...the American Indian tribes of the Northern Great Plains have the prior and paramount right to the waters of all rivers, streams, or other bodies of water, including all tributaries thereto, which flow through, arise upon, underline or border upon their reservations." It is supported with legal citations and pertinent sections in the United States Constitution. The report also describes the principles they desire to be used in the planning and development of their natural resources which are those promulgated by the United States Water Resources Council and published in the Federal Register, September 10, 1973.

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THIS REPORT WAS PREPARED FOR SUBMISSION TO THE NORTHERN GREAT PLAINS RESOURCES PROGRAM BY THE NATIVE AMERICAN NATURAL RESOURCES DEVELOPMENT FEDERATION OF THE NORTHERN GREAT PLAINS. PUBLICATION OF THE FINDINGS AND RECOMMENDATIONS HEREIN SHOULD NOT BE CONSTRUED AS REPRESENTING EITHER THE APPROVAL OR DISAPPROVAL OF THE SECRETARY OF THE INTERIOR, THE SECRETARY OF AGRICULTURE, THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY, OR THE GOVERNORS OF THE STATES INVOLVED.

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I. DECLARATION OF INDIAN RIGHTS TO THE NATURAL RESOURCES IN THE NORTHERN GREAT PLAINS STATES.

The Indian tribes and people of the Northern Great Plains being confronted with an all pervasive crisis threatening the present and future uses of their natural resources, including but not limited to their land, right to use of water and their coal, do herby declare as follows:

The Northern Great Plains area of the United States is presently attracting international attention due to the energy crisis which makes the vast coal resources of this area very appealing for immediate development. The development of this coal and the concomitant use of water, air, and other natural resources threatens the viability of our environment and the continued existence of the twenty-six tribes which occupy the Northern Great Plains within the states of Montana, Wyoming, North Dakota, South Dakota and Nebraska.

These tribes would be severly burdened with immense consequences resulting from any natural resource development. It is for this reason that these tribes desire to submit the following declaration for inclusion in the report of the Northern Great Plains Resources Program. The tribes have been asked to participate in numerous work group statements on this matter, but it is readily apparent that the major impact upon the survival of these Indian tribes will be foisted upon the erosion of their water rights and the depletion of water resources due to the need for massive quantities of water to develop the coal. The Indian water rights here involved, then, are like the Indian fishing rights considered by the United States Supreme Court in United States v. Winans, 198 U.S. 371, 381, (1905); they are "not much less necessary to the existence of the Indians than the atmosphere they breathe."

The Indian tribes of the five states do hereby give notice to the world that they will maintain their ownership to the priceless natural resources which are geographically and legally related to their reservations. Indian tribes and people, both jointly and severally, have declared and the courts have sustained that the American Indian tribes of the Northern Great Plains have the prior and paramount rights to the waters of all rivers, streams, or other bodies of water, including all tributaries thereto, which flow through, arise upon, underline or border upon their reservations. These prior and paramount rights would extend to all waters that may now or in the future be artificially augmented or created by weather modification, by desalination of presently

unusable water supplies, by production of water supplies as a byproduct of geothermal power development, or by any other scientific or other type of means within the respective reservations in the Northern Great Plains area.

In view of the tribes' prior and paramount rights to all the waters to which they are geographically related, it is self-evident that any major diversion of said waters for any purpose would constitute an encroachment upon Indian water rights. All federal agents or agencies, including but not limited to the Bureau of Reclamation, Corps of Engineers, states, persons, parties or organizations are, therefore, put on notice that any diversion or use of such tribal waters shall be at their own risk.

LEGAL BASIS FOR INDIAN WATER RIGHTS

The Indians' prior and paramount rights were sustained in the United States Supreme Court case familiarly known as the "Winters Doctrine", Winters v. United States, 207 U.S. 564 (1908). The Court held in that case that the right to use of water from the Milk River, in the State of Montana, which bordered upon the Fort Belknap Indian Reservation was reserved by the government in the treaty for the benefit of the Indians of that reservation.

The Winters Doctrine embraces reservation rights whether created by treaty, statute or executive order, before or after statehood.

- U.S. v. Walker River Irrig. Dist., 104 F.2d 334 (1939)

- Ariz. v. Cal., 373 U.S. 546 (1963)

The waters reserved are exempt from appropriation by non-Indians pursuant to state law.

- Winters v. U.S., supra

- U.S. v. Ahtanum Irrig. Dist., 236 F.2d 321 (9th Cir. 1956)

The courts have consistently held that the nature of the right was such that sufficient water was reserved for the present and future needs of the Indians, whatever the use and without limit.

- Ariz. v. Cal., supra

It is the definition of the purpose of each reservation that requires careful consideration. The language of the various treaties speaks in terms of providing a permanent home or place to live, free from encroachment by the non-Indian.

- See Treaty of Fort Bridger, July 3, 1858 (15 Stat. 643)

Although the fundamental rules of Indian treaty construction have been variously stated, there are essentially three well defined and well established rules.

The first fundamental rule is that "treaties with Indians must be interpreted as they would have understood them."

- Choctaw Nation v. Oklahoma,
397 U.S. 620, 630 (1970)

- Jones v. Meehan,
175 U.S. 1, 10-11 (1899)

- United States v. Shoshone Tribe,
304 U.S. 111, 116 (1938)

- United States v. Winans, supra

A second rule of Indian treaty construction is that doubtful expressions are to be resolved in favor of the Indian parties to the treaty.

- McClanahan v. State Tax Comm'n of Arizona,
411 U.S. 164, 36 L.Ed.2d 129, 137 (1973)

- Carpenter v. Shaw,
280 U.S. 363, 367 (1930)

- Standing Rock Sioux Tribe v. United States,
182 Ct. Cl. 813 (1963)

A third important canon of Indian treaty construction is that Indian treaties are to be constructed in favor of the Indians.

- Choctaw Nation of Indians v. United States,
318 U.S. 423, 431-432 (1943)

- Tulee v. Washington, 315 U.S. 681, 684-85 (1942)

- United States v. Shoshone Tribe, supra

Executive order reservations are no different than treaty reservations when dealing with the question of Indian water rights.

- Ariz. v. Cal., supra

- U.S. v. Walker Irrig. Dist., supra

Language in a federal statute affecting the rights of Indians is to be construed in the same manner as is language in treaties with Indians.

- Squire v. Capoeman, 351 U.S. 1, 6 (1956)

HISTORICAL AND CONSTITUTIONAL BASIS OF INDIAN WATER RIGHTS

It is essential that any consideration of the nature of the Indians' rights to the use of water be based upon their inherent sovereign power of self-government.

Indian tribes from time immemorial had the right to use the water in the streams in the area wherever they made their homes; they had the right to use the lands to hunt and fish. Indian lives generally were oriented to the rivers which made habitation and survival possible in contrast to the arid lands which extended for miles on each side of their ancient homes. Title to these valuable property rights has always been to the Indians and we hold that these rights to the use of water are still those of the Indian peoples. The Indian tribes hold that (See Attachment No. 1) they retained title to all that they did not cede or give up, including the invaluable rights to the use of water in the streams and rivers which arise, border, traverse, or underlie their lands and which were retained by them when their reservations were established. These rights are to be treated as private in character and not as federally reserved rights to the use of water owned by the public as a whole.

These IMMEMORIAL RIGHTS are protected by the United States Constitution. The Supremacy Clause proclaims, "The Constitution and the laws of the United States which shall be made in pursuance thereof; and all TREATIES made, or which shall be made, under authority of the United States, shall be the supreme law of the land." The COMMERCE CLAUSE provides that the Congress has the authority "to regulate Commerce with Foreign Nations, and among the several states, and with the Indian Tribes."

Water rights of the Indians were not given up or ceded in any treaties and the United States Supreme Court enunciated this fact in the case of Winters v. United States in 1908, as above stated. Today, more than ever, the Indian finds himself in a life and death competition for a water supply rapidly becoming inadequate to meet all demands. The biggest problem facing them as Indian people today is the need to determine the extent of the rights or in practical words, the amount of water they have a right to use.

The tribes understand that they will be able to promulgate water codes and under authority from the Secretary of Interior, they will be able to regulate and distribute

waters among the people on the various reservations. This will give them a counterpart to the state procedures for filing of water rights and uses and will keep the states from trying to regulate their waters.

Historically, non-Indian users of water have made investments utilizing water in complete disregard to the prior and paramount rights of the Indian tribes. Many examples prove that local and state interests have encouraged the development of water resources even though the supply was subject to Indian rights, choosing to ignore those superior rights in hopes that Congress, at some future date, would "buy out" the Indians as has been somewhat of an unofficial policy in the constant erosion of Indian property, land, minerals, and water. The Indian tribes cannot affort to be "put off", "bought off" or "turned off" any longer in dealings pertaining to their valuable resources.

Tribes	Treaties & Exec. Orders (Establishing Present Reserv.)	Major Treaties Effecting Northern Great Plains Tribes			
		Ft. Laramie 1851 11 Stat. 749	Ft. Laramie 868 15 Stat. 649	Ft. Bridgen 1868 15 Stat. 673	Division of Great Sioux Reservation 1889 25 Stat.888
1. Blackfeet	Treaty 10/17/1855 11 Stat. 657	X			
2. Crow	Treaty 1851 11 Stat. 749	X	See (1) Below		*
3. Assiniboine	Ft. Peck 1873 Exec. Order	X			
4. Gros Ventre	Ft. Belknap 1888 Exec. Order	X			
5. Flathead	Treaty July 16, 1855 12 Stat. 975				
6. Chippewa-Cree	Cong. Act 1916 39 Stat. 739				
7. No. Cheyenne	Exec. Order 11/26/1884	X	See (2) Below		
8. Omaha	Treaty 1854 10 Stat. 1043				
9. Winnebago	Cong. Act 1865 14 Stat. 671				
10. Santee Sioux	Exec. Order 6/20/1866				X
11. Mandan 12. Hidatsa 13. Arikara	(Ft. Berthold ((Exec. Order ((4/12/1870	X X X			
14. Devils Lake Sioux	Treaty 1867 15 Stat. 505				
15. Turtle Mountain Chippewa	Exec. Order 12/21/1882				
16. Cheyenne River Sioux	Cong. Act 1889 25 Stat. 888	X	X		X
17. Crow Creek Sioux	Treaty 1868 15 Stat. 649	X	See (3) Below		
18. Flandreau Santee Sioux	Cong. Act 1935		X		
19. Oglala Sioux	Cong. Act 1889 25 Stat. 888	X	X		X
20. Rosebud Sioux	Cong. Act 1889 25 Stat. 888	X	X		X
21. Sisseton & Wahpeton Sioux	Treaty 1867 15 Stat. 505	See (4) Below	See (5) Below		
22. Standing Rock Sioux	Cong. Act 1889 25 Stat. 888				X
23. Yankton Sioux	Treaty 1858 11 Stat. 743				
24. Lower Brule Sioux	Treaty 1965 14 Stat. 699	X	X		X
25. Shoshone	Treaty 1868 15 Stat. 673			X	
26. Arapahoe	Temporarily Placed Upon Shoshone Reserv. 1878 (7) See Below	X	See (6) Below		

NOTES FROM ABOVE:

1. Separate Crow Treaty -- at Ft. Laramie in 1868 15 Stat. 649 Reduced 1851 Reservation.

2. Northern Cheyenne -- Separate 1868 Ft. Laramie Treaty 15 Stat. 655 Reservation recognized but no definite Boundaries established.

3. The Crow Creek Sioux Reservation was plotted by executive order in 1963 but was not officially established until recognized by the 1868 Ft. Laramie Treaty 15 Stat. 649. This was an existing reservation on the east bank of the Missouri River.

4. An 1851 Treaty 10 Stat. 949, provided that the Sisseton and Wahpeton Sioux cede all land in Minnesota and Iowa to the U.S., but could remain on their land in North Dakota and South Dakota.

5. Same as #3 -- This was a Reservation already established east of the Missouri River prior to the 1868 Treaty at Fort Laramie.

6. The Arapahoe were parties to the same 1868 Ft. Laramie Treaty which the Northern Cheyenne were, 15 Stat. 655. Again no definite boundaries were set up.

7. The 1878 action by the Indian Commissioner was without any other authority. However in 1897 Cong. purchased a part of the Shoshone Reservation for the Arapahoes, 30 Stat. 62. See Shoshone Tribe of Indians v. United States, 299 U.S. 476 (1937).

ATTACHMENT #1

6 (a)

II. PRINCIPLES FOR PLANNING THE DEVELOPMENT OF INDIAN WATER, LAND AND MINERAL RESOURCES

There is no question regarding the need for thorough evaluation of the extent in value (including social and cultural values) of Indian natural resources on the Northern Great Plains and areas draining the lands and reservations of each of the twenty-six Indian tribes concerned. At stake is the future economic development and well-being of Native Americans residing on Indian reservations in Montana, Wyoming, North Dakota, South Dakota, and Nebraska. Adequate methods for evaluating the feasibility, economics, or desirability of the development of Indian water, land, and mineral resources have been sorely lacking for several decades.

On October 30, 1973, new "Principles and Standards for Planning Water and Related Land Resources" were promulgated as federal law by the U.S. Water Resources Council 1/ which clearly require of the trustee a rigorous analysis of natural development programs including equal detail for all resource development alternatives. The priciples were established for planning the use of water and land resources of the United States, including Indian reservations, to achieve objectives determined cooperatively through the coordinated actions of federal, state, and local governments, (including Indian tribes and individuals) private enterprise, organizations, and individuals.

They provide the basis for federal participation; including federal cooperation with Indian tribes, with river basin commissions, states, and others in the preparation, formulation, evaluation, review, revision, and transmittal to the Congress for natural resource development plans and programs. The plans and programs include those affecting states, regions, Indian tribes, and river basins for planning of federal and federally assisted water and related land resource programs and projects and certain federal licensing activities.

The overall purpose of water and land resource planning is to promote the quality of life by reflecting societies' preference (including Indian country) for attainment of the objectives defined below:

1/ Published in the Federal Register, September 10, 1973, Volume 38, No. 174, Part III; Enacted October 30, 1973.

a. To enhance national economic development by increasing the value of the nation's output of goods and services and improving national economic efficiency.

b. To enhance the quality of the environment by the management, conservation, preservation, creation, restoration or improvement of the quality of certain natural and cultural resources and ecological systems.

The principles and standards establish a system of accounts which will display both beneficial and adverse effects of each natural resource plan and each alternative to that plan and will compare the benefits between regional development, social well-being, and environmental effects. The display of beneficial and adverse effects will be prepared and presented in such a manner that different levels of achievement and/or development in each account can be readily discerned and compared by the public and all interested parties clearly indicating the trade-offs among alternative plans.

For purposes of accounting a clear conveyance of information to the public, the distribution of beneficial and adverse effects will be shown to whomever they accrue (specifically to the recipient of the project benefits). This will include display of the distribution of both beneficial and adverse effects to regions, income classes, and interest groups relevant to the particular plans and will reflect not only economic costs but social, cultural and environmental effects as well. The system of accounts will also display the beneficial and adverse effects of a particular project in relation to the rest of the nation.

The Water Resources Council will establish procedures for relating regional accounts to the rest of the nation. These procedures, however, have not yet been developed, but are presently being drafted. The use of such reporting regions will not, however, rule out the use of other regions whose delineations are important (especially Indian reservations) in measuring beneficial or adverse effects on regional developments.

This is an extremely important aspect of the principles and standards as they affect Indain natural resource development projects. That is, the principles and standards can be used on a regional basis with the Indian reservation being a

designated region, rather than an entire river basin, state or other large geographic entity that would dilute the actual benefits or the adverse effects on Indian people on a given reservation.

The evaluation, systematic display, and comparison of alternative plans for a project affecting a state, Indian tribe, region, or river basin will provide the basis for selecting a plan best suited for those parties most heavily impacted. It is important to recognize that the selection of a plan is ultimately made by policy-makers and not by administrators or technicians. These new methods, however, provide better decision-making tools and information for the policy-makers in rendering their decision.

The Water Resources Council implemented the principles by establishing standards for planning water and land resources in accordance with the Water Resources Planning Act (P.L. 89-80). The standards were implemented and published at the same time as were the principles.

The effect of the principles and standards for planning for Indian water and land resources is that they must be used by river basin commissions, federal-state organizations, and each of the federal departments and agencies. In addition, the Office of Management and Budget, the Council on Environmental Quality, and other organizations in the executive office of the President must use these principles and standards in their review of proposed project, basin, or regional plans, including those affecting Indian natural resources whether on or off the reservation. It is interesting to note that the Chairman of the United States Water Resources Council is the Secretary of the Interior -- the trustee of Indian people.

The foregoing principles, standards, and procedures must be used with diligence and caution by Indian leadership. There is little question that they provide a powerful tool or weapon with which Indian tribes can demand of the trustee rigorous forthright analysis of any project. However, as with any tool or weapon, it can be rustled from the user and used against him. In other words, the principles have the potential of being a two-edged sword: for requiring methods for detailed analysis of projects which are beyond financial ability of the tribes to accomplish. Therefore, we require that the cost of project analysis be paid in full by the trustee.

An additional caution is that the principles and standards are only as good as the information used to address them; as with the computer or any accounting technique -- if you put garbage in you can only get garbage out. We, therefore, demand of the trustee, other federal agencies, states, local governments, and other parties, that the principles be addressed not only rigorously, but with candor and factual information.

The need for the foregoing principles and standards especially for evaluation of natural resource development programs in Indian country was clearly stated in the recently released National Academy of Sciences/National Academy of Engineering "Report to the Energy Policy Committee of the Ford Foundation", regarding land use, surface ownership, and mineral ownership:

> Land Use, Surface Ownership, and Mineral Ownership
>
> "The questions of land, surface and mineral ownership in the coal areas are complex and in many cases still unresolved. The federal government controls much of the surface and even larger fraction of the minerals. Indian nations also claim ownership of large areas, sometimes in conflict with other private claimants and the federal government. In addition, the individual states hold significant tracts, as do the railroad companies. The ownership pattern varies, but the checkerboard is common over much of the area. No reliable statistics have been compiled for either surface or mineral ownership....Although leasing of federally owned coal deposits has been suspended since 1970, leasing of coal lands and other ownerships has continued. In Montana alone, more than 600,000 acres are currently held in coal leases, although only a fraction of those are suitable for strippable deposits."

Filling the foregoing lack of information identified by the NAS and the NAE Report is the focal point and objective of the Northern Great Plains Resources Program. The NGPRP study covers the five states of Montana, Wyoming, North and South Dakota, and Nebraska, and is being coordinated by the United States Department of Interior.

These new methods apply not only to water resource developments, but to related land resources, including mineral developments in which the federal government has a stake in monetary terms or as trustee.

The Northern Great Plains Resources Program, in cooperation with the Indian tribes, must identify not only short-term opportunities for natural resource management in Indian country, but must address the problems of natural resource management for future generations of Indian tribes and Indian people.

III. ISSUES TO BE ADDRESSED BY THE TRIBES OF THE NORTHERN GREAT PLAINS PRIOR TO DETERMINING THE EXTENT OF DEVELOPMENT OF THEIR MATERIAL RESOURCES

The vast natural resources located on or near Indian reservations in the Northern Great Plains offer a potential for significant economic development. Development will also present some major problems for the Indian people in the area. In order to make intelligent choices as to the nature and extent to which the development of their natural resources, including coal, water and air should take place, the tribes must have before them complete information on the nature and value of their coal, water and land resources, together with the political, cultural, economic and environmental effects development will bring. This data must be made available before development takes place, so that effective planning is possible. In the following sections, it is demonstrated, using the little data which is available, the enormous size of the resources and the potential problems which accompany the use of these resources. It is emphasized that huge information gaps remain; it is the duty of the federal government in carrying out its trust responsibility to the Indian people residing on the reservations to gather this data and supply it to the Indian people who will be affected.

The National Water Commission, in its final report to the President, recommended:

> At the request of any Indian Tribe, the Secretary of the Interior or such other Federal officer as the Congress may designate should conduct studies in cooperation with the Indian Tribes of the water resources, the other natural resources, and the human resources available to its reservation. An object of the studies should be to define and quantify Indian water rights in order to develop a general plan for the use of these rights in conjunction with other tribal resources....Congress should appropriate funds to support the studies.... (Recommendation 14-1.)

This recommendation should be carried out immediately with respect to the twenty-six Indian tribes in the Northern Great Plains.

In considering the development issue, the following questions need to be answered:

A. How much Indian land will be affected by coal development operations? Plate 1 is a map showing all of those Northern Great Plains Indian reservations that contain strippable coal reserves. Table 1 shows that a large proportion of the five Northern Great Plains states is underlain by coal deposits.

TABLE 1

SIZE AND PERCENTAGE OF COAL BEARING AREAS IN NORTHERN GREAT PLAINS STATES AND INDIAN RESERVATIONS

State	Total Area of States in Sq. Mi.	Area Underlain by Coal-Bearing Rock Square Miles	Percent
Montana	147,138	51,300	35
North Dakota	70,665	32,000	45
South Dakota	77,047	7,700	10
Wyoming	97,914	40,055	41
Total	392,764	131,055	33

Indian Reservation	Total Area of Reservation in Sq. Mi.	Area Underlain by Coal-Bearing Rock Square Miles*	Percent*
Cheyenne River	2,210	442	20
Standing Rock	1,321	403	33
Blackfeet	1,472	1,030	70
Rocky Boy	170	153	90
Fort Peck	1,506	1,506	100
Fort Berthold	706	706	100
Wind River	2,932	1,173	40
Northern Cheyenne	679	679	100
Crow	2,431	1,458	60

*Areas and percentages are estimated based on best available data including N.A.S. Report and Westwide Study.

It can be seen that substantial portions of nine Indian reservations within those states have significant coal resources. Indeed, three of the reservations are entirely underlain by coal-bearing rock. Thus, if coal reserves on these reservations were developed to the fullest extent possible, the land base of those tribes could be seriously

eroded, or even destroyed. As we note in Table 1 the data on coal under Indian lands is very incomplete and the estimates offered are highly speculative.

B. How much Indian coal can be recovered economically? The Bureau of Mines has estimated that the nine reservations contain 36 billion tons of coal. However, this figure is misleading. Much of the total coal reserve cannot be recovered by any of the mining techniques known today. Another type of figure frequently cited to show coal reserves, the recoverable reserve, is also irrelevant in the Northern Great Plains. This figure includes all coal that can be recovered by present technology through underground or surface mining. However, in the Northern Great Plains, where there are huge reserves of strippable coal in competition with coal on Indian lands, it is questionable that coal recoverable only by underground mining will be exploited in the near future.

Furthermore, the great extent of coal reserves now classified as mineable by underground methods may, in the future, become strippable through technological, economic, and/or legislation pending in Congress.

The key figure, then, is the strippable reserve. Although approximate figures are available on a state-wide basis, the strippable reserves for the nine coal-rich Northern Great Plains reservations are unknown.

Once again, crucial data necessary for intelligent decision making is unavailable to the Indians. We do know that we are talking about huge amounts of strippable coal. For example, the mid-April 1973 edition of Coal Age (page 117) reports that there are eight billion tons of strippable coal on the Crow and Northern Cheyenne Reservations.

A second factor in determining the value of coal resources, aside from the quantity of coal available, is its quality. In particular, the sulfur content and heat rating of the coal are important. This information is usually made available to the tribes only after a coal prospecting permittee has completed its exploration and is ready to invoke its preference right to lease selected portions of the permit area. By then, of course, the tribes are unable to seek an adjustment of the royalty to reflect favorable data, since the royalty and bonus payments have been irrevocably fixed under the terms of the contract. Needed immediately are new procedures for exploration, production, and development leases on Indian lands.

A third variable in the value of the coal resource is the cost associated with production. One of the most important variables in production cost is the stripping ratio; the thickness of the overburden covering the coal compared to the thickness of the coal seam. The lower the stripping ratio; the less it costs to mine. Stripping ratios of 16:1 and higher are commonly encountered at eastern and mid-western strip mines, while stripping ratios of up to 12:1 are common in many of the western states (see Table 2).2/ It appears that the stripping ratio for one tract of coal land owned by the Crow Tribe in the ceded portion of their reservation averages between 3.5 and 4:1.

TABLE 2

Sulfur Content of
Estimated Strippable Reserves[a]
(Millions of short tons)[b]

State	Stripping[c,d] Ratio	Strippable Reserves 1%S	1-2%S	2%S	Total
Arizona	8:1	387	0	0	387
Colorado	4:1 to 10:1	476	24	0	500
Montana	2:1 to 18:1	3,176	224	0	3,400
N.Mexico	8:1 to 12:1	2,474	0	0	2,474
N.Dakota	3:1 to 12:1	1,678	397	0	2,075
S.Dakota	12:1	160	0	0	160
Utah	3:1 to 8:1	6	136	8	150
Washington	10:1	135	0	0	135
Wyoming	1.5:1 to 10:1	13,377	65	529	13,971
Totals		21,869	846	537	23,252

Source: a. U.S. Bureau of Mines Information Circular 8531
b. 1 short ton = 0.91 metric tons
c. Stripping ratio = thickness of overburden/thickness of coal seam
d. Stripping ratio is also defined by some mining engineers as cubic yards of overburden per ton of coal. Sec., e.g., Surface Mining by E.P. Pfleider, American Institute of Mining, Metallurgical, and Petroleum Engineers, New York, 1968

2/ National Academy of Sciences, "Rehabilitation Potential of Western Coal Lands," a report to the Energy Policy Project of the Ford Foundation (Washington, D.C., 1973).

Another important factor in determining the value of the Indian coal resources includes the present and future market for comparable quality coal, freight rates, and a survey of royalties paid to other coal owners.

C. How much water will be needed to mine and convert these coal resources? Table 3 of the N.A.S. Report, shows the gross amount of water available in several key streams in the Northern Great Plains. (This total is subject to depletion for irrigation, industrial and municipal uses, as well as evaporation.) These depletions may substantially reduce the amount of water actually available -- estimates are that only 241,000 acre-feet are available from the Tongue River and 287,300 acre-feet from the Powder River. (See N.A.S. Report 59.)

TABLE 3

STREAMFLOW FOR KEY GAGING STATIONS, MISSOURI BASIN

Gaging Station	Years of Record	Average Annual Discharge (ac ft)*
Powder River at Arvada, Wyo.	40	196,000
Powder River at Moorhead, Mt.	42	327,000
Tongue River near Decker, Mt.	11	358,000
Tongue River at Miles City, Mt	28	302,000
Bighorn River at Bighorn, Mt.	26	2,760,000
Yellowstone River at Miles City, Mt.	44	8,150,000

*1 ac ft = 0.125 hectare-m

Although it appears that there is a huge quantity of water available for coal development, in fact, the large energy companies have already applied for most of this available water. According to the newsletter of the Northern Great

Plains Resources Council (February, 1974), energy companies have already filed state appropriation, appropriation applications and applications and requests with the Bureau of Reclamation in the following amounts:

River	Total Appropriations, Options, and Requests
Powder	336,375
Tongue	225,175
Bighorn	2,193,000
Yellowstone	824,250
TOTAL	3,588,800

The above total is three times the highest quantity of water required in the NGPRP forecast for the entire region.

In the following paragraphs, we discuss water usage associated with various facets of the coal mining, processing, and conversion that may well take place in the Northern Great Plains.

1. Mining.

According to the N.A.S. Report (page 63), actual mining operations require very little water, most of which can be obtained readily from shallow wells. Nonetheless, the drilling of such wells could lower the water table in local areas.

2. Surface Mine Rehabilitation.

The N.A.S. Report (pages 64,65) indicates that supplemental irrigation is essential in most areas, if revegetation is to succeed. The report states that from .50 to .75 acre-feet per acre will be required for this purpose annually. However, every rehabilitation study to date concludes that rehabilitation plans on the Northern Great Plains, which are dependent on supplemental irrigation, are both ecologically and economically unsound. In other words, there is a real question of whether these areas should be disturbed at all, since there is no guarantee that these lands can ever be rehabilitated.

3. Coal Conversion.

The N.A.S. Report (page 160) indicates that one 1,000 megawatt electric generating station, using an evaporative tower for cooling and operating at full capacity requires 20,000 acre-feet of cooling water annually. For a similar plant using a cooling pond, instead, the requirement drops to 12,000 acre feet per year; and to only 2,000 acre-feet per year if a dry cooling tower is used. Only one of the utilities in the Northern Great Plains are planning to use this more expensive cooling method, despite the huge water saving that could be achieved. Since the North Central Power Study indicates that up to 50,000 megawatts of electric generating capacity could ultimately be constructed in the Northern Great Plains, cooling water requirements could conceivably rise as high as one million acre-feet. (The North Central Power Study (Vol. 1, page 16) contains a somewhat smaller estimate -- 855,000 acre-feet per year.)

A plant producing 250 million cubic feet a day of synthetic natural gas from coal would require approximately 30,000 acre-feet of water per year. (In 1972, Consolidation Coal Compan proposed a complex of four such plants on the Northern Cheyenne Reservation.) A coal liquefaction process, whereby synthetic crude oil is extracted from coal, is now being developed. A plant producing 100,000 barrels per day would consume approximately 65,250 acre-feet of water per year, N.A.S. Report (page 163).

D. How will land resources be affected? The coal mining and conversion process uses up another valuable Indian resource -- land. In many areas, where rainfall is very sparse, or reclamation efforts are minimal, strip-mined lands may be irretrievably lost for other uses, such as grazing, housing, etc. Even if reclamation is successful, much of the land to be strip-mined and all land needed for conversion facilities, transmission lines, roadways, and other rights-of-way, will be lost for the life of the mining/conversion operation -- often more than a quarter of a century. The areas subject to potential damage from strip mining are significant. According to the N.A.S.

Report (Table 3.5) between 1965 and 1972, Montana coal mining operations disturbed 46 acres per million tons of coal mined. At that rate, mining the 8 billion tons of strippable coal on the Crow and Northern Cheyenne Reservations would consume 368,000 acres, 18% of the total area of the two reservations.

E. What will be the major environmental effects?

1. The major environmental impacts of strip mining and coal conversion include:

a.) Pollution of ground and surface waters.
b.) Deposition of salts and toxic minerals, which render large areas permanently infertile.
c.) Disruption of aquifers and aquifer recharge areas, this may result in dry wells, lowered water tables, increased erosion, and flood damage.
d.) Air pollution associated with the dust from mining. If a conversion process, such as gasification or electric power production is involved, there will be air pollution from particulate matter, sulfur oxides, nitrogen oxides, radioactivity, and trace metals. In addition, there will be large amounts of sulfate sludge and flyash, produced by air pollution abatement devices, that must be disposed of.
e.) Associated with strip mines and coal conversions are a network of roads, power transmissions lines, slurry pipelines, and railroads, which cause pollution from dust and erosion, as well as visual pollution.

If there is to be any hope of adequate reclamation of strip mined areas, the planning process must begin well before actual mining. Data that must be gathered includes:

a.) Climatological and meteorological data.
b.) Indigenous plants and animals.
c.) Thorough analysis of the physical and chemical components of soil overburden.
d.) Description of groundwater supplies, flows and uses.
e.) The location and nature of unusual scenic, historical, archeological, and cultural values in the area to be mined.

2. Competent experts will be needed to interpret this data, to help formulate a mining and reclamation plan, and to make sure the plan is enforced. These experts must be capable of explaining the data and resulting options in non-technical terms so that tribal members can understand all alternatives before making decisions.

F. What will be the social and cultural effects?

Mining operations will bring a large influx of outside workers, technicians, and managers onto the reservations. If coal conversion facilities are located near the mine sites, the number of outsiders will be far larger. (It should be remembered that Consolidation Coal Company indicated to the Northern Cheyennes that their proposed gasification complex would require 30,000 workers.) Presumably, these people will have to live on or near the reservations; the cultural and social changes associated with their arrival will be severe. These new people will need:

1. Housing, as well as recreational, shopping, religious, and other facilities. Tribal councils will have to make difficult decisions in the field of urban planning.

2. Water supply and sewage treatment. Where will the funds for these facilities come from?

3. Police, fire, and hospital protection.

4. Roads and other public facilities.

5. Educational facilities.

Local Indian ways and customs may well be trampled by the numerical superiority of outsiders and significant stresses on the tribal government structure can be expected.

G. What should be the timing, extent and institutional methods used to develop Indian coal resources? Coal development on Indian reservations may be carried on in varying degrees of intensity. Some of these options include:

1. Small-scale coal mining, to be spread out over a large number of years.

2. Very intensive, large-scale mining, leading to the quickest possible depletion of resources.

3. Large-scale mining with the coal to be converted to electricity on or near the reservation.

4. Large-scale mining with gasification complex on or near the reservation.

As the intensity of development increases, so do all the problems mentioned previously. The decision about the degree and timing of industrialization rests with the tribes, who must have access to the aforementioned data.

Various institutional arrangements, such as partnerships, joint ventures and wholly owned Indian operations are available as alternatives to the standard leasing policy. These other business forms offer closer tribal control over mining operations, a chance to participate in the profits and thus avoid the effects of inflation, and some tax advantages. The tribes should be given competent advice by experts in financial and tax planning.

IV. CONCLUSIONS AND RECOMMENDATIONS

The Indian tribes in the Northern Great Plains are the owners of a substantial number of natural resources. In addition, these resources exist in such large quantities so as to require their orderly and planned development to assure that the tribes and their members will continue to live in an environment which they determine to be most desirable.

Many of the tribes in the Northern Great Plains region are being asked to make major development decisions with respect to their resources without the aid of sufficient scientific data which is so necessary within the decision making process in order that all of the viable alternatives to the proposed development can be considered.

Moreover, the prior and paramount tribal rights to the use of water which arise upon, traverse or border upon their reservations are being encroached upon by the states, the federal government, and their users; that these prior and paramount rights to the use of water must be protected with skill and diligence by an aggressive effort to protect, preserve, conserve, and develop these rights to their fullest extent.

In light of the aforementioned conclusions, the Indian tribes in the Northern Great Plains make the following recommendations:

Recommendation No. 1

That the twenty-six tribes in the Northern Great Plains establish a Federation for the purpose of:

Formulating programs that will describe and quantify the Northern Great Plains Indians' natural resources and cultural resources.

Develop programs that will obtain sufficient scientific data necessary to make informed decisions relative to the development of Indian resources, and an understanding of the impact of such development on other resource and cultural values.

Act as the Indian representative on federal and state/federal land and water planning organizations and other cooperative federal and federal/state programs that will have direct or indirect effects on Indians and their resources.

Provide, at the request of individual tribes, assistance in developing management alternatives for their resources.

Recommendation No. 2

That the Congress of the United States recognize, authorize and appropriate monies for the Federation. And that said authorized monies be appropriated in the amount of $750,000 for the first year's operating budget with authorization for the Federation to return to request monies for operation in subsequent years. These monies would be utilized by the Federation to fulfill the goals in Recommendation No. 1 to obtain the necessary resource people to study and evaluate the tribes' natural resources and to develop a plan for the development of said resources.

Recommendation No. 3

That the President of the United States as the principal agent of Indian Rights, authorize and/or cause a moratorium on the allocation of waters by all federal agents and agencies including the Bureau of Reclamation and Corps of Engineers from the various federal projects within the Northern Great Plains until such time as Indian Rights are fully recognized and protected.

Recommendation No. 4

That Indian water, air, coal and land resources should be fully recognized, protected, and that Indian resource development projects should be initiated, authorized, and funds appropriated at the request of the Indian tribes, by the Congress so that the Indian resources may be put to beneficial use for the tribes who may then receive the full economic benefit of their valuable rights.

In closing, then, the Indian tribes of the Northern Great Plains are faced with the same problems today that the Indians were facing one hundred years ago. Sitting Bull, in a speech he gave in 1875 (one year before the Battle of Little Bighorn), spoke to these very problems when he stated:

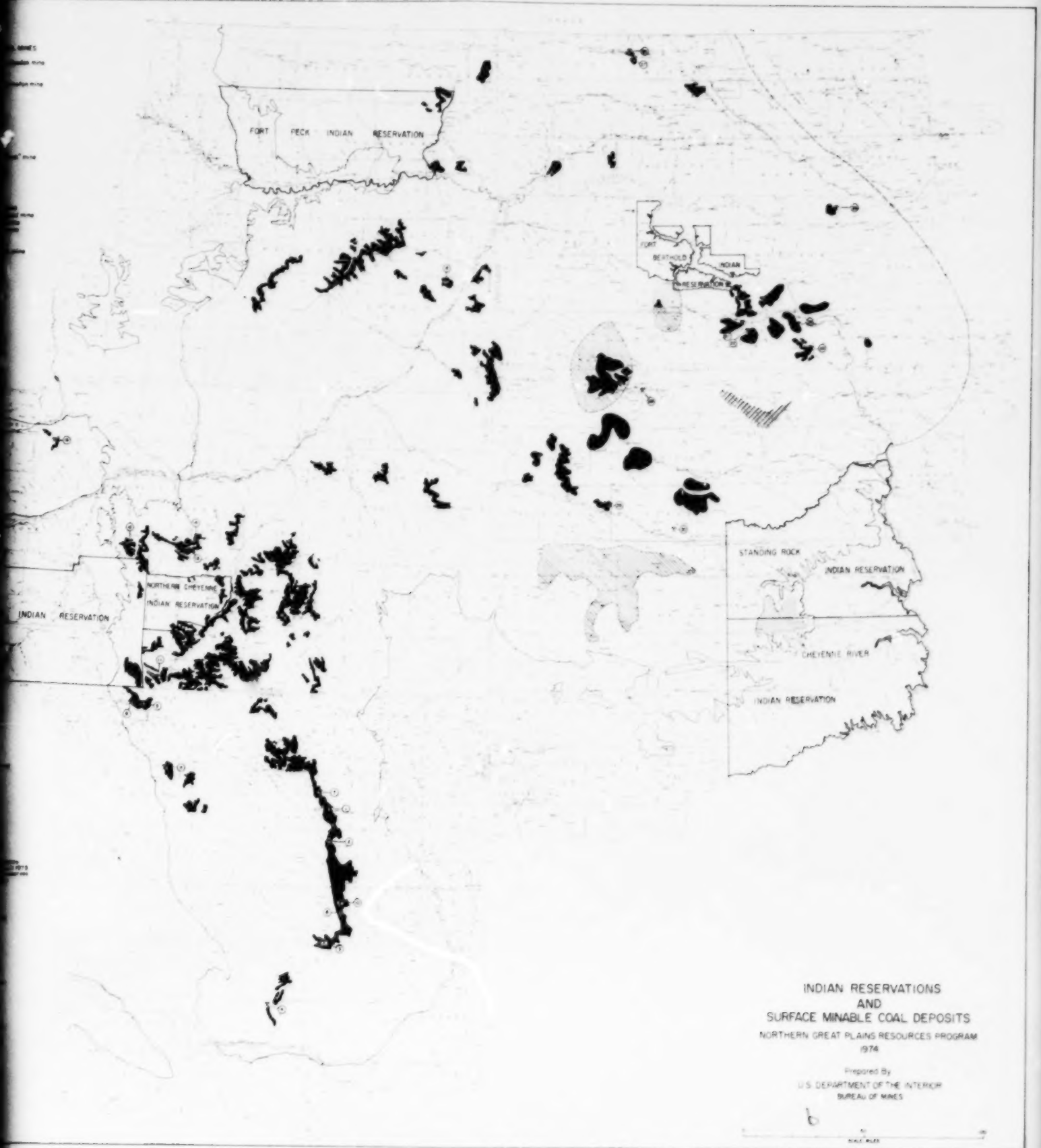
We will yield to our neighbors--even our animal neighbors--the same right as we claim to inhabit the land. But we now have to deal with another breed of people. They were few and weak when our forefathers first met them and now they are many and greedy. They choose to till the soil. Love of possessions is a disease with them. They would make rules to suit themselves. They have a religion which they follow when it suits them. They claim this Mother Earth of ours for their own and fence their neighbors away from them. They degrade the landscape with their buildings and their waste. They compel the natural earth to produce excessively and when it fails, they force it to take medicine to produce more. This is an evil.

This new population is like a river overflowing its banks and destroying all in its path. We cannot live the way these people live and we cannot live beside them. They have little respect for Nature and they offend our ideals. Just seven years ago we signed a treaty by which the buffalo country was to be ours and unspoiled forever. Now they want it. They want the gold in it. Will we yield? They will kill me before I will give up the land that is my land.

The Indian tribes of the Northern Great Plains and their leaders of today will not yield. They will fight to protect, preserve and conserve the resources which their forefathers gave their lives to retain.

GPO 856 - 214

ACTIVE AND PROPOSED COAL MINES
WYOMING
1 Wyodak Resources Development Co., Wyodak mine
2 Amax Coal Co., Belle Ayr mine
3 Kerr-McGee Co. (proposed)
MONTANA
11 Decker Coal Co.
12 Westmoreland Resources, "Sarpy Creek" mine
13 Peabody Coal Co., Big Sky mine
14 Western Energy Co., Colstrip mine
15 Knife River Coal Co., Savage mine
16 Helenbia Coal Mining Co.
NORTH DAKOTA
20 Bauer Noonan, Inc., Bauer Noonan mine
21 North American Coal Corp., Indian Head mine
22 Knife River Coal Mining Co., Baukol mine
23 Consolidation Coal Co., Superbird mine
24 Bauer Noonan, Inc., Noonan mine
25 Consolidation Coal Co., Velva mine
26 Knife River Coal Mining Co., Glenharve mine
27 Baronness Coal Co.
29 Husky Broadening, Inc., Lehigh mine
30 Arrowhead Coal Co.
FORT PECK INDIAN RESERVATION
FORT BERTHOLD INDIAN RESERVATION
CROW INDIAN RESERVATION
NORTHERN CHEYENNE INDIAN RESERVATION
STANDING ROCK
EXPLANATION
Outline of the Northern Great Plains coal field
Known stripping coal deposit
Area of known, but less well defined stripping coal deposits
Area of potential additional stripping coal deposits
SOURCES OF INFORMATION
MONTANA
WYOMING
NORTH DAKOTA
SOUTH DAKOTA
COAL MINES



INDIAN RESERVATIONS
AND
SURFACE MINABLE COAL DEPOSITS

NORTHERN GREAT PLAINS RESOURCES PROGRAM
1974

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